

MASTER COURSE OUTLINE

Prepared By: Shawn McDaniel

Date: August 2013

COURSE TITLE Gas Tungsten Arc Welding II

GENERAL COURSE INFORMATION

Course Num: 282 Dept.: WLD CIP Code: 48.0508 Intent Code: 21 Credits: 3 Total Contact Hrs Per Qtr.: 66 Lecture Hrs: **Distribution Designation:**

Lab Hrs:66

(Formerly:) Program Code: 814

Other Hrs:

COURSE DESCRIPTION (as it will appear in the catalog)

This course introduces students to carbon steel pipe welding in the 1G, 2G, 5G, and 6G positions using cup walk methods with 1/8" electrodes on various sizes of pipes.

PREREQUISITES

WLD 212 or instructor permission

TEXTBOOK GUIDELINES

Text and materials as decided by welding faculty. (Example: *Modern Welding Technology* by Howard Cary)

COURSE LEARNING OUTCOMES

Upon successful completion of the course, students should be able to demonstrate the following knowledge or skills.

1. The student will have the ability to apply the GTAW process on open root pipe in all positions, and be capable of passing industry standard tests

INSTITUTIONAL OUTCOMES

COURSE CONTENT OUTLINE

At the completion or the course, the student will display the skills to perform the following:

- Carbon steel 8" schedule 40 pipe, 1G. Use ER70S-2 1/8" wire 1.
- Carbon steel 8" schedule 40 pipe 5G 2.
- 3. Carbon steel 6" schedule 40 pipe 5G
- Carbon steel 4" schedule 40 pipe 5G 4.
- 5. Carbon steel 8" schedule 40 pipe 2G
- Carbon steel 6" schedule 40 pipe 2G 6.
- Carbon steel 4" schedule 40 pipe 2G 7.
- 8. Carbon steel 8" schedule 40 pipe 6G
- 9. Carbon steel 6" schedule 40 pipe 6G
- 10. Carbon steel 4" schedule 40 pipe 6G

DEPARTMENTAL GUIDELINES (optional)

Grades will be calculated as follows:

50% Based on completing all course competencies.

50% Based on Lab Participation, Cleanup on a daily basis, and following ALL Safety rules.

The grade awarded for the class is as follows:

95-10	0 4.0	86	3.1	77	2.2	68	1.3
94	3.9	85	3.0	76	2.1	67	1.2
93	3.8	84	2.9	75	2.0	66	1.1
92	3.7	83	2.8	74	1.9	65	1.0
91	3.6	82	2.7	73	1.8	60-64	0.7
90	3.5	81	5.6	72	1.7	0-59	0
89	3.4	80	2.5	71	1.6		
88	3.3	79	2.4	70	1.5		
87	3.2	78	2.3	69	1.4		

DIVISION CHAIR APPROVAL

DATE